

EFFICIENT INTERACTIVE TV**ABSTRACT OF THE DISCLOSURE**

Content identifiers are provided to uniquely identify content, or a subset of the content. The content identifiers are used to index corresponding interactive data. The interactive data may be maintained in a central base, or may be distributed to routers in various subsets. In one embodiment, a set-top box receives content in an interactive television system. The content is digitally watermarked to include content identifiers. The set-top box includes a watermark decoder, which detects the watermark identifier. The identifier is used to access information, such as interactive data. The interactive data is then used to access interactive content. In another embodiment, interactive data and/or content are pushed to the set-top box. In addition, the context of the situation can be communicate to improve the interactive experience.